

WHAT IS CLAIMED IS:

1. A one-time-use camera comprising:
an electronic digital camera system for generating digital image data
5 representative of a captured image;
a non-volatile memory in communication with the electronic digital
camera system for storing the digital image data, the non-volatile memory
comprising a matrix memory component, the matrix memory component
including a first layer of parallel conductors, a second layer of parallel
10 conductors oriented mutually orthogonal to the first set of parallel conductors,
and a functional medium disposed between the first layer and the second layer,
wherein an addressable cell in the functional medium is defined at an
intersection of each first layer parallel conductor and second layer parallel
conductor; and
15 wherein supplying an electrical energy directly to the functional medium
of the cell detects or changes the logical state of the cell, for reading and writing
the digital image data at the matrix memory component.
2. The camera of claim 1, wherein the functional medium is made of an
20 organic material with non-linear impedance characteristics.
3. The camera of claim 1, wherein the functional medium includes a
polymer material.
- 25 4. The camera of claim 1, wherein the functional medium includes an
amorphous silicon material.
5. The camera of claim 1, wherein the functional medium includes a low
molecular weight organic material.

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5 7. The camera of claim 1, further comprising a camera housing, wherein the
wherein the non-volatile memory component is attached to the housing.

9. The camera of claim 8, wherein the camera back memory assembly is removable from the front portion.

11. The camera of claim 1, wherein the non-volatile memory component is removable from the camera.

25 13. The camera of claim 1, wherein the memory component includes an
external device interface for transferring the digital image data to an external
device.

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receiving an image and converting the image to digital image data stored in the memory component.

15. The camera of claim 1, wherein the electronic digital camera system
5 includes an external device interface for transferring the digital image data stored at the memory component to an external device.

16. A one-time-use camera comprising:
an electronic digital camera system for generating digital image data
10 representative of a captured image, the electronic digital camera system including a mode switch for allowing a user to select a mode of operation of the camera;

a non-volatile memory in communication with the electronic digital camera system for storing the digital image data, the non-volatile memory
15 comprising a matrix memory component, the matrix memory component including a first layer of parallel conductors, a second layer of parallel conductors oriented mutually orthogonal to the first set of parallel conductors, and a functional medium disposed between the first layer and the second layer, wherein an addressable cell in the functional medium is defined at an
20 intersection of each first layer parallel conductor and second layer parallel conductor; and

wherein supplying an electrical energy directly to the functional medium of the cell detects or changes the logical state of the cell, for reading and writing the digital image data at the matrix memory component.

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17. The camera of claim 16, wherein the electronic digital camera system includes a microphone system for recording sound as part of the digital image data.

30 18. The camera of claim 16, including a selectable mode of operation for recording a still picture as the digital image data.

19. The camera of claim 16, including a selectable mode of operation for recording still picture and sound associated with the still picture as the digital image data.

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20. The camera of claim 16, including a selectable mode of operation for recording video as the digital image data.

21. The camera of claim 16, including a selectable mode of operation for recording video and sound associated with the video as the digital image data.

22. A method of using a one-time-use camera comprising:
defining a digital camera including a camera housing, an electronic digital camera system for generating digital image data representative of a captured image; and a non-volatile memory including a write once memory matrix component in communication with the electronic digital camera system for storing the digital image data;

capturing an image using the digital camera and storing the image as digital image data in the non-volatile memory;
removing the non-volatile memory; and
transferring the digital image data from the non-volatile memory to a portable medium.

23. The method of claim 22, comprising defining the write once memory matrix component including a first layer of parallel conductors, a second layer of parallel conductors oriented mutually orthogonal to the first set of parallel conductors, and a functional medium disposed between the first layer and the second layer, wherein an addressable cell in the functional medium is defined at an intersection of each first layer parallel conductor and second layer parallel conductor.

24. The method of claim 22, defining the portable medium as photographic prints.

25. The method of claim 22, defining the portable medium as a digital video
5 disk.

26. The method of claim 22, further comprising replacing the non-volatile
memory with a second non-volatile memory such that the one-time-use camera
is available for reuse.

10 27. The method of claim 26, wherein the step of replacing the non-volatile
memory with a second non-volatile memory includes replacing the second
portion of the housing with a third housing portion having the second non-
volatile memory attached thereto.

15 28. The method of claim 22, further comprising the step of sending the
portable medium to a user.

29. The method of claim 22, including defining the functional medium to
20 include an organic material having non-linear impedance characteristics.

30. The method of claim 22, including defining the functional medium to
include an amorphous silicon material.

25 31. The method of claim 22, including defining the functional medium to
include a polymer.

32. The method of claim 22, including defining the functional material to
include a low molecular weight organic material.

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